

Notice of Allowability

Application No.

09/830,290

Examiner

Jean E. Lesperance

Applicant(s)

PIRS ET AL.

Art Unit

2674

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed October 7, 2005.
2. ☒ The allowed claim(s) is/are 13-24, renumbered as 1-12.
3. ☒ The drawings filed on 03 January 2005 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.


Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____


XIAO WU
PRIMARY EXAMINER

DETAILED ACTION

1. The amendment filed October 7, 2005 is entered and claims 13-24 are pending.

Allowable Subject Matter

2. Claims 13-24 are allowed.
3. The following is an examiner's statement of reasons for allowance: the claimed invention is directed to the driving method for the LCD electrooptic switching element or LC electrooptic switching element.

Independent claim 13 identifies a uniquely distinct feature "integrating a potential difference between the two electrodes of the electrooptic switching element via an integrator to obtain a time integral value Int of the electric driving voltage; and controlling the change of polarity of the electric driving voltage such that the time integral value Int of the electric driving voltage remains within a predetermined interval $V_{c1} < \text{Int} < V_{c2}$ Where V_{c1} and V_{c2} are electric potentials input to a reference input of a respective comparator"

Independent claim 17 identifies a uniquely distinct feature "a voltage translator, wherein the control signals output by the control "flip/flop" circuit are input to the voltage translator, said voltage translator transforming said control signals into electric driving signals for the electrooptic switching element and outputting the transformed control signals to the electrodes of the electrooptic switching element, the amplitude of said

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square-wave electric driving signals being determined by a voltage level V_{lcd} , which is input to a control input of the voltage translator".

Independent claim 18 identifies a uniquely distinct feature "a second analog switch having a select input associated with the output of the comparator such that with every change of the polarity of electric driving signals for the electrooptic switching element, said second analog switch switches for a short time to output from an electrically floating first input to a constant electric potential V_p , at a second input, in order to reset the integrator to an initial state, said analog switching output being input to the integrator and wherein the outputs of the control "flip/flop" circuit are input to the voltage translator, which transforms said control signals into the electric driving signals for the electrooptic switching element and outputs the transformed control signals to the electrodes of the electrooptic switching element, the amplitude of said driving signals being determined by the electric voltage V_{lcd} , which is connected to a control input of the voltage translator".

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Yatabe (Patent # 6,188,395).

The closest arts, Yatabe as discussed above, either singularly or in combination, fails to anticipate or render obvious the above limitations obvious.

4. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean Lesperance whose telephone number is (571) 272-7692. The examiner can normally be reached on from Monday to Friday between 10:00AM and 6:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard, can be reached on (571) 272-7603.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(571) 273-8300 (for Technology Center 2600 only)


Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Jean Lesperance


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Date 1/19/2006


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